

AVIATION

The Oldest American Aeronautical Magazine

NOVEMBER 12, 1923

Issued Weekly

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VOLUME
XV

SPECIAL FEATURES

NUMBER
20

AVIATION AND THE NAVY

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REQUIREMENTS OF A MAN-POWERED AIRPLANE

NAVY FLIERS MAKE NEW WORLD'S SPEED RECORDS

THE GARDNER, MOFFAT CO., INC.

HIGHLAND, N. Y.

225 FOURTH AVENUE, NEW YORK

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THE remarkably low fuel and oil consumption, together with the extremely light weight per horsepower make the Wright "T" engine the most efficient thus far produced.

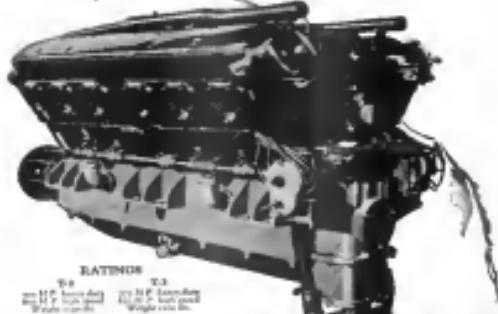
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WRIGHT MODELS ENGINES

NOVEMBER 12, 1923

AVIATION

VOL. XV. NO. 20

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General Newsroom
ADVERTISING MANAGER

Vol. XV

AVIATION

NOVEMBER 12, 1923

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No. 20

Aviation and the Navy

CAPTAIN LUKE McNAMEE, Director of Naval Intelligence, has attempted to correct elsewhere in this issue the "misconception existing among the general public as to the attitude of the Navy towards aviation." He handles the acute subject of the naval battleship versus aircraft in a way that we believe will be entirely convincing.

He states: "Trade will be taken care of by adding blisters or explosive charges to the older ships' sides to protect the ship's vital front bows from bombs exploding nearby in the water. Additional deck will be added to old battleships to prevent penetration of the bombs that drop on board." The importance of naval appropriations as it will bring up in the discussion of Naval appropriations the advisability of spending money to reinforce the older ships in the way he suggests. As to the practicability of the plan, it is highly improbable that Captain McNamee can convince the Congressmen who have seen the launching pictures of 1922 and 1923 that an old battleship could be protected from aircraft bombs by either blisters or any number of steel decks.

The most important part of his statement is his assertion that "in spite of an expenditure on aircraft of over one billion dollars since 1917, we have not today one-tenth of the aircraft we would need to enter war tomorrow. This is due to the short life of aircraft, the high cost of development and the frequency of crashes and operating casualties. Two-thirds of that cost would build a navy bigger than we present—a navy that would be good for twenty years. To coach for the economy argument." This is the first time, to our knowledge, that a responsible officer has definitely answered the total war cost of aviation to the Army and Navy. If this viewpoint is accurate it would be the cost of Naval Aviation at the current figure of about a billion dollars; as right handed aviation dollars would seem to be a very high figure at the cost of the Army Air Service during and since the war, using the figures given out by General Fairchild, Captain McNamee will probably be asked to give the authority for his figure of one billion eight hundred million dollars.

This statement brings up the fairness of comparing the cost of warfare with a new development—with the cost of a permanent navy. The avowed purpose of this statement was to correct misunderstandings. Would it not have been better to aviation at a time when the appropriations were being considered, to omit reference to the warships expenditures and compare naval and aviation expenditures in time of peace? At present Naval aviation is allowed five per cent of the total naval appropriation.

Every flying pilot in the Navy and Army will be surprised by Captain McNamee's concluding observation on the subject of fighting that the pilot engages in. He says, "The Navy is going ahead developing its aviation to the limit of

its appropriations, but it hasn't forgotten that it isn't the man that hits and runs away that wins the fight." A reasonable interpretation of this view of the mission of fighting aircraft might be that the seaplane pilot "hits and runs away." We cannot believe that the Director of Naval Intelligence implied any reflection on the bravery of our pilots who frequently fought to the death in the air, setting an example of striking out the enemy in his own territory.

A Necessary Amendment

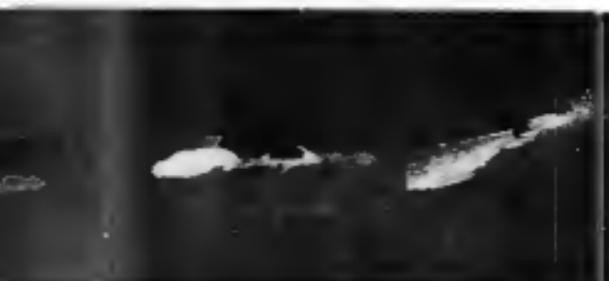
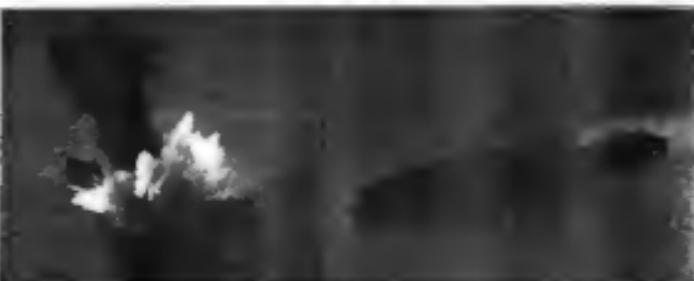
NOW that the International Aeromotor Federation has duly recognized the new world's records established with the assistance of a refueling plane by Capt. Lowell H Smith and Lieut. John P. Richter of the Army Air Service, it seems timely and proper to raise the question of the desirability of recognizing further records made in this manner. We have done so before the F.A.I. passed on these records that would have been unfair to the two pilots in question, for it might have impaired their chances of having their very remarkable and difficult performances given official recognition.

The whole question, in our way of looking at it, is this: The purpose of an aeroplane record is not so much to stimulate individual skill and prowess as it is to encourage technical development in the airplane. Now, while the successful and repeated demonstration of airplane refueling in flight is indeed a most important and valuable technical development, there remains the fact that the success of airplane design did not in the least profit by this particular record. The plane with which that record was made, to all intents a standard DH-4, could continue to fly for a week or two weeks, or in fact enter the Liberty engine response overtake, if in addition to fuel and fluid new crews would also be transferred from a converging aircraft. And this appears quite feasible, though admittedly difficult.

That such a performance would irritate the very purpose for which some airplane records are made, seems too obvious to require much elaboration. It would simply mean the stagnation of airplane design is one of the most important regimens of progress, and cutting efficiency, which after all means more efficient aerofils and aerodynamic combinations, and more reliable and economical aircraft engines.

It follows from the above that the F.A.I. rules governing records of maximum duration and maximum distance should include the restriction "without refueling." As announced to this effect, submitted to the F.A.I. by the National Aeromotoric Association, while highly desirable as technical grounds, would also wipe out the belief harbored in some quarters that we are living up to the letter rather than to the spirit of the F.A.I. rules.

The National Aeromotoric Association has here a splendid opportunity for giving the international aviation world another proof of true American sportsmanship.



Official Photographs, U. S. Army Air Service

These are probably the most remarkable aerial photographs ever taken of the sinking of a battleship. The explosion of a long distance from the *Missouri* is shown lighting up both sides of the ship and sending a plume of black smoke and smoke. In the next picture the old battleship is listing badly to port and the after deck is seen to be burning. In a minute or two the ship lists over and a column of smoke is seen spouting from the bottom of the bottom of her hull. The black smoke dashes forth, raising the bow high in the air, and then the great old ship sinks almost vertically to a last resting place on the bottom of the sea.

So that our readers may have what can be reported as an authoritative statement of the Navy's point of view regarding the recent radio address of Capt. J. M. McNamee, Director of Naval Intelligence of the Navy, an advocate of the Navy's Naval Aviation, and a naval leader, let me say, except as now Capt. McNamee outlines, it is always interesting to have all sides of any question opened up for discussion. Aviation has occasionally heard that its success in the Navy's attitude toward Aviation does not reflect the real point of view. It has taken the position that while recently the Navy has shown great interest in the development of aircraft, this has largely been in the form of protective measures for the defense of the fleet. An Admiral Macfie, Chief of the Bureau of Naval Aviation recently said:

"Out of three hundred and forty million dollars allotted for maintenance of the Navy, Naval Aviation is allowed less than fifteen million. On this meager appropriation we have attempted to struggle along and barely keep afloat."

"Aviation is dominating and controlling world conditions today. The overwhelming air force of France is smothering her to dictate terms. She is able to occupy German territory and hold it in defiance of the protests or action of any other power at present."

"With the advent of aviation, one power, as shown by our great naval writer, Captain Makin, had settled a centuries old score in the history of the world. An power has changed all this. In the present and in the future, wars will be settled by control of the sea as well as by control of the air."

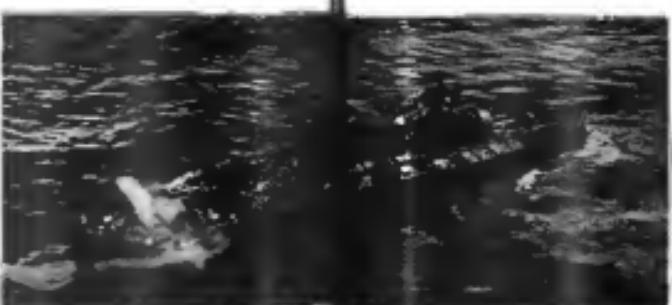
It is this free and fair Naval Aviation that seems to us unchallengeable. We'd also feel that Captain McNamee is wrong when he says that if we had a "big air fleet" and no Army or Navy we would lose our territorial possessions. His assumption must also grant that the enemy, too, is without such forces as he underestimates the intelligence of those charged with the defense of our country. It will, however, be of interest for those concerned about the future of American aviation to read the Navy attitude as forcibly presented—EDWARD.

There seems to be a good deal of misunderstanding among the general public as to the attitude of the Navy toward aviation.

Aviation and the Navy

By CAPT. J. M. McNAMEE

Director of Naval Intelligence, Navy Department



The burned deck of the battleship *Virginia* after a fire. The picture, to agree with Captain McNamee when he claims "burned" or "additional steel deck" would save an old battleship from such damage.

Starting off with the assumption that aircraft will pel all ships out of business, as certain widely advertised individuals maintain, it is only natural that the man in the street should picture naval officers as lighting to hold on to these jobs and opportunities, and that the man in the street should oppose them.

I have been in the Navy thirty-three years and I have seen the battleship get out of business on paper many times. First there was the man. Small steamers with long runs were going to surround the battleship like so many locusts and sting it to death. Then came the torpedo boat. The destroyer and the submarine that were to sink it with a torpedo meeting only first thoughts, followed by the appearance of the airplane. Then came the submarine, that is to say, the submarine appears in its present day. But the old battleship, like the old flag, is still there. Every new form of attack has developed a corresponding defense and the battleship still stands the backbone of every country's naval defense.

Protection Against Air Attack

Battleship protection against air attack will be of two kinds, defensive and offensive. The defensive consists in adding blisters or explosion shrapnel to the older ships sides to protect the ship's vital parts from bombs exploding nearby in the water. New battleships have this protection built into the hull. Additional steel decks will be added to old battleships. These new protection of the hull that drop out board. In adding the additional decks will be greater the weight of the ship and the constant change of course that will throw the battleship off its course, as well the damage of breaking steel and from strength gains. Moreover the battleship will have to sacrifice the fire of decks of machine guns before he can get out within range. This may all be classed as defensive measures.

The only offensive measure against planes is to shoot them down from the decks of the battleship itself. These fighting planes will have in their mission to shoot down the slow heavy bombers before it can get near enough to do any damage. That means that if the battleship is to put its attack to sea must be protected by an escort of fighter planes. But the protection of the battleship when near an enemy coast will be undertaken by the other fighting planes other than those of the battleship itself can carry. These will be protected by aircraft that accompany the battleship. The plane aircraft provided with means for flying off and landing on the carriers and landed by the fire of the fleet should make a most effective defense against land planes that would be flying at sea far removed from their base, and certain of destruction.

Personal Notes

Lieut. Gail Morris, U.S.N., has been detached from the Bureau of Ordnance and was to leave for the west coast on Nov. 1. He has been attached to the Aircraft Squadrons Battle Fleet, based at San Diego, Calif. Lieutenant Morris has been the operations officer of the Flight Division since the establishment of the Bureau of Ordnance two years ago. He will be very much missed by the officers and personnel of the Bureau, and all units in Washington have the best of luck in his new duty.

Lieut. Comdr. Charles E. Mason, U.S.N., reported to the Plans Division of the Bureau of Ordnance for temporary duty on Nov. 1. Lieutenant Mason is attached to the Staff Air Station at Pensacola, Fla.

Lieut. Comdr. L. C. Shadel, U.S.N., has been detailed to the Bureau of Ordnance to take charge of the Aviation Ordnance Section. He is now at the Bureau of Ordnance and will take over his new duties in a few days. Lieutenant Shadel was in command of a destroyer on the Asiatic station prior to his assignment to the Bureau of Ordnance.

Cruiser Pittsburgh at Schneider Cup Race

The USS Pittsburgh, flagship of the U. S. Naval Forces in Europe, was at Croydon, England, during the Schneider Cup Race, and was used as a base for the racing teams.

After the races, the crews entertained all officers at the Prince Commander, Staff and Officers of the ship at a buffet luncheon and the Royal London Yacht Club gave a dinner to the sailors, which the Prince Commander and his wife were invited. At both of these functions the best of feeling and comradeship was evident. Everyone was full of pride in the performance of the Naval pilots and all officers and their commanding officers were present. Both the Pittsburgh and Irvine stated that the presence of the U. S. Pittsburgh, with all kinds of ship cheering them on, had a decided effect on them and caused them to greater effort. Also that the Pittsburgh, anchored at the corner was an excellent mark for them to fly past the seaward turning point. The ship's boats assisted in patrolling the course and did duty at the starting point.

Reserve Stations Making Good Progress

A record of 11 hr 16 min flying time for one day, with only two planes in operation, was made during the week ending Oct. 29 by the Naval Reserve Air Station at Squantum. Weather was favorable and the result, flying for that week was reflected in the first three days of the month when a total of 36 hr 54 min flying time was scored. The Squantum reserves were determined to spend all of their working hours in the air.

Twenty men have been qualified as pilots from the Naval Reserve Air Station at Fort Hamilton, Brooklyn, N. Y., since June 1. This is an excellent total when the limited facilities at that station are considered.

Submarine Plane Trials Under Way

The submarine 43 is now at the Naval Air Station at Memphis Roads, Va., and trials with the submarine plane are in progress. The trials will be completed in Oct. 26 and will be conducted for some time to demonstrate the practicability of aircraft operations from a submarine. The planes to be tested for this work are the XBS and MBS type. These planes were designed especially to be carried on board submarines and are the standard service airplane in the world. The planes of the Curtiss Co. of Garden City, L. I., and the MBS planes were built by the Glenn L. Martin Co. of Cleveland.

Battle Fleet Planes Land in High Wind

Two planes of the Bureau of Ordnance, Two Aircraft Squadrons Battle Fleet, while proceeding to San Francisco American Legion Convention on Nov. 15, were forced to land the fuel in a high wind and sand storm at Mojave, Calif. The velocity of the wind was 45 mph and the air was full of sand. The planes landed successfully. Each was the force of the wind, that is taking off took the wind, one of the planes was in the air within 10 ft of the point of starting. The planes were in the vicinity of 100 ft of the ground type.

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CURTISS WINS AGAIN



NAVY CURTISS RACER

On Sept. 28, 1923 at Cowes, England, the Navy Curtiss Seaplanes with Curtiss D-12 Motors took first and second place in the International Races, winning the SCHNEIDER CUP and establishing a NEW WORLD'S SPEED RECORD FOR SEAPLANES—177 MILES PLUS PER HOUR.

On Oct. 6, 1923 at St. Louis, U.S.A., the Navy Curtiss Racers with Curtiss D-12-A Motors took first and second place winning the PULITZER TROPHY for the third successive year and again establishing a NEW WORLD'S SPEED RECORD—243 MILES PLUS PER HOUR.

The Curtiss Reed one-piece duralumin propellers were used in all these ships as well as in the Curtiss Oriole when Casey Jones won the "On to St. Louis" Race.



STANDS FOR SPEED WITH SAFETY

CURTISS AEROPLANE & MOTOR COMPANY, Inc.

Garden City, N. Y.

Factories at Garden City, N. Y. — Buffalo, N. Y.

